

REMARKS

Claims 1-27 remain in this application. Claims 1, 12 and 17 have been amended to make it more clear that system is interactive between the diagnostic center and the remote exam center and further that different types of examination devices may be employed.

The Examiner has rejected Claims 1, 3-6, 11-14, 16-23 and 25-27 under 35 U.S.C. § 102 (b) as being anticipated by U.S. Patent No. 5,993,001 to Bursell et al. Applicant respectfully traverses each of these rejections as they pertain to the present claims.

Section 102 (b) states that a person is entitled to a patent unless the invention was patented or described in a printed publication in this or a foreign country before the invention thereof by the applicant. In order to sustain a rejection under § 102 (b) each and every element of the claimed invention must exist in a single patent or printed publication. Applicant asserts that the present invention is not anticipated by the prior art of record.

Applicant's invention is directed to a telemedicine system and method for conducting an eye examination on a patient. The system 100 includes a remote examination center 101 which includes several optical devices which are designed and configured to conduct an examination of the patient's eye. The remote center 101 further includes a controller for collecting the information from each or all of the optical devices and additionally conducts the examination of the patient's eye. The method further includes a diagnostic center 107 where the information collected at the remote location 101 is collected, analyzed and evaluated, and the need for further testing is ascertained. The diagnostic center is in two way electronic communication via communications link 102 with the remote exam center. An exam console 119 is also included at the diagnostic center where a diagnosis may be conducted based on the collected information and based on this diagnosis, a report may be generated, additional examinations may be directed, and prescriptions may be dispensed. The diagnostic center may also include a central database 209 for storage and maintenance of exam records.

The claimed invention provides critical, efficient and complete eye care to patients in remote

locations. The eye examination may include a plurality of diagnostic tests which relate to the condition of the patient's eye and the overall health of the patient. The present invention enables interactive communication and permits a thorough examination using a variety of devices and allows the examination proceeding to be modified as necessary based on the results as they are transmitted and analyzed by the practitioner. For those who would otherwise have to travel long distances for a complete eye examination may now be able to obtain such an exam in a convenient and inexpensive manner. Similarly, those medical professionals that may be in need of assistance from a specialist who is outside of their geographic area can utilize this system to obtain inexpensive and timely assistance.

In contrast, U.S. Patent No. 5,993,001 to Bursell et al. is directed to an image acquisition unit to be used for retinal degeneration screening. The apparatus disclosed in Bursell et al. includes an image acquisition station 20 which is primarily comprised of an adjustable retinal camera 32 and operation controls which are connected via a telecommunications link 22 to a computer 18 network which is capable of receiving and managing the images. The acquisition unit may include several such cameras in combination to provide for a more detailed or stereo image. The computer network is interfaced with a medical record database 10 and such is interconnected using a telecommunications link. The acquired images may be taken and viewed stereoscopically on a monitor attached to the computer for analysis by a trained ophthalmologist. A graphic interface may be included as computer software to permit enhancement of the video images, identification of the features of the retina and the like. The telecommunications systems permits remote connections between the computer and acquisition unit.

As can be seen from the foregoing, Applicants' invention is unique in that it offers a remote examination console that can utilize a variety of medical examination tools to permit a full diagnosis of the patient's health as it relates to eye care, in contrast to Bursell et al. which exclusively discloses acquisition of a retinal picture. While Bursell et al. discloses the use of multiple acquisition units, they are multiple but identical units designed to provide for stereo or other dimensional imaging. In contrast, the multiple medical devices disclosed in Applicants' application include a retinal camera, a slit lamp, and a refractor to name a few. Additionally, the communications link disclosed

in the Applicants' invention permits two-way transmission of data and information between the remote location and the diagnostic center.

The diagnostic center disclosed in the present invention is also unique in that it is also designed to enable the practitioner to review and analyze the collected information in real time, conduct further tests as may be indicated as the examination proceeds, relay further commands to the remote location, or transmit a diagnosis or prescription to the patient located at the remote location. These features are not present in the prior art. Nowhere does Bursell et al. disclose or even suggest the diagnostic center as described in the present invention. Applicant's diagnostic center is capable of a complete and detailed analysis of the collected information and based on this information, further tests or communications are directed to the remote console. Such features are not present in the prior art.

Independent Claims 1 and 17 have been amended to make it more clear that system is interactive between the diagnostic center and the remote exam center. Dependent Claims 2-16 and 18-27 which depend from Claims 1 or 17 are similarly amended. Therefore, on the basis of the preceding arguments, Applicants assert that nowhere in the prior art is it taught or suggested a telemedicine system that utilizes a plurality of different devices which located at a remote console and linked to a diagnostic center which permits two-way communication between the diagnostic center where a practitioner can evaluate and analyze the information collected at the remote console and transmit such to the remote console or modify the examination based on such analysis, therefore it is believed that these claims are allowable over the prior art of record.

The Examiner has rejected Claims 1 and 12 under § 102 (b) as unpatentable over Bursell et al. Claim 1 is an independent claim and Claim 12 depends from Claim 1 and therefore includes each and every limitation contained in Claim 1. Therefore, in view of the above arguments directed towards Bursell et al., Applicants assert that the present claims are patentable over Bursell et al.

The Examiner has rejected Claim 3 under § 102 (b) as unpatentable over Bursell et al., arguing that Bursell et al. discloses a computer means for analyzing the data. However, the computer disclosed in Bursell et al. is merely image processing modules that are capable of enhancing feature definition of the image, filtering image colors or enhancing and identifying image features and the

like. In contrast, the computer means disclosed in Applicants' invention is capable of detailed analysis of the collected information, including performing advanced statistical analysis and the detection of pathological conditions. Therefore, the computer disclosed in Bursell et al. does not perform the same function as that disclosed in Applicants' invention. In view of the foregoing, Applicants assert that the Claim 3 is patentable over Bursell et al.

The Examiner has rejected Claims 4 and 5 under § 102 (b) as unpatentable over Bursell et al. Both claims depend from Claim 1 and therefore include each and every limitation contained in Claim 1. Therefore, in view of the above arguments directed towards Bursell et al., Applicants assert that the present claims are patentable over Bursell et al.

The Examiner has rejected Claim 6 under § 102 (b) as unpatentable over Bursell et al. Claim 6 is an dependent claim which depends from Claim 1 and therefore includes each and every element contained in Claim 1. Therefore, in view of the above arguments directed towards Claim 1, Applicants further asserts that Claim 6 is not anticipated by Bursell et al.

Claim 11 was rejected under § 102 (b) as unpatentable over Bursell et al. This claim similarly depends from Claim 1 and therefore includes each and every element contained in Claim 1. As detailed above, Applicants assert that Claim 11 is patentable over Bursell et al.

The Examiner has rejected Claims 13 and 14 under § 102 (b) as unpatentable over Bursell et al. Both claims depend from Claim 1 and therefore include each and every element contained in Claim 1. Therefore, in view of the above arguments directed towards Bursell et al., Applicants assert that the present claims are patentable over Bursell et al.

The Examiner has rejected Claim 16 under § 102 (b) as unpatentable over Bursell et al. Claim 16 is an dependent claim which depends from Claim 1 and therefore includes each and every limitation contained in Claim 1. Therefore, in view of the above arguments directed towards Claim 1, Applicants further asserts that Claim 16 is not anticipated by Bursell et al.

Finally, Claims 17-23 and 25-27 were rejected under § 102 (b) as unpatentable over Bursell et al. Independent Claim 17 has been amended to make it more clear that Applicants' claimed method permits interactivity between the diagnostic center and the remote exam center and further that a variety of medical devices may be employed. Dependent Claims 18-23 and 25-27 depend

from Claim 17 are similarly amended. Since the dependent claims depend from Claim 17, they therefore include each and every element contained in Claim 17. In view of the above arguments directed towards Bursell et al., which are equally applicable with regard to the method claims, Applicants assert that Claims 17-23 and 25-27 are patentable over Bursell et al.

The Examiner has further rejected Claim 2 under 35 U.S.C. § 103 (a) as being unpatentable over Bursell et al. in light of U.S. Patent No. 6,027,217 to McClure et al., and Claims 7-9 were rejected under 35 U.S.C. § 103 (a) as being unpatentable over Bursell et al. in view of U.S. Patent No. 6,523,954 to Kennedy et al., and Claims 10, 15 and 24 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Bursell et al. in view of U.S. Patent Application No. 2001/032100 A1 to Mahmud et al. Applicant respectfully traverses each of these rejections as they pertain to the present claims.

In order to sustain a rejection under 35 U.S.C. § 103 (a) each element of the claimed invention must be disclosed or described by the prior art and any differences may not be such that they would have been obvious to one of ordinary skill in the art at the time the invention was made. Additionally, one cannot use the teachings or suggestions of the Applicant to establish obviousness. *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1551 (Fed. Cir. 1983). Instead, the proper test is whether the combined teachings of the prior art references suggest the improvements embodied by the claimed invention. *In re GPAC*, 57 F.3d 1573, 1581 (Fed. Cir. 1995). Applicant asserts that the subject invention is not obvious in light of the prior art of record.

Claim 2 was rejected under § 103 as being unpatentable over Bursell et al. in view of McClure et al. As detailed hereabove, no where does Bursell et al. describe or identify a remote examination console capable of conducting a variety of medical examinations to permit a full diagnosis of the patient's health as it relates to eye care, the remote console being linked to permit two-way transmission of data and information between the remote location and the diagnostic center, such diagnostic center being designed to enable the practitioner to review and analyze the collected

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information, conduct further tests, relay further commands to the remote location, or to transmit a diagnosis or prescription to the patient located at the remote location. By contrast, Bursell et al. merely describes the use of a retinal camera that is capable of transmitting a signal to a remote location for analysis. Since neither Bursell et al. nor McClure discloses or suggests the use of multiple diagnostic apparatus, the use of two way communication to further analyze the patient or to communicate directly with the examination equipment, or the analytical capabilities of the diagnostic center, it would not have been obvious to one of ordinary skill in the art to combine the two references to achieve the claimed invention. For the forgoing reasons, Applicants' believe that their invention is patentable over the prior art and Claim 2 should be allowed.

Claims 7-9 were rejected under § 103 as being unpatentable over Bursell et al. in view of Kennedy et al. Since Bursell et al. no where describes Applicants' invention, there can be no suggestion to combine either Bursell et al. nor Kennedy to achieve the use of multiple diagnostic apparatus or the use of two way communication to further analyze the patient or to communicate directly with the examination equipment as claimed by Applicants. It would not have been obvious to one of ordinary skill in the art to combine these two references to achieve the claimed invention. For the forgoing reasons, Applicants' believe that their invention is patentable over the prior art and Claims 7-9 are allowable.

Claims 10, 15 and 24 were rejected under § 103 as being unpatentable over Bursell et al. in view of Mahmud et al. As further detailed above, Bursell et al. no where describes Applicants' invention, and neither reference contains any suggestion to combine the invention disclosed in Bursell et al. with that disclosed in Mahmud et al. to arrive at the claimed invention. Therefore, it would not have been obvious to one of ordinary skill in the art to combine the two references to achieve the claimed invention. For the forgoing reasons, Applicants' believe that the claimed invention is patentable over the prior art and that Claims 10, 15 and 24 should be allowed.

The Examiner has indicated that corrected drawings are required in this case. Applicant wishes to advise the Examiner that formal drawings were submitted to the Official Draftsman on April 23, 2003.

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For the foregoing reasons Applicant submits that the method and system for examination and diagnosis of the eye as claimed herein is not fairly taught by any of the references of record, taken either alone or in combination. Therefore, allowance of the claims is believed to be in order. Therefore, early notice of allowance is respectfully solicited. If for any reason it is believed that any of the claims in the case might not be in condition for allowance, it is suggested that the examiner might telephone the undersigned attorney to discuss the merits of the case.

Respectfully submitted,



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